Polar CS100™

User Manual

POLAR®

LISTEN TO YOUR BODY

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The information relevant to using the product with the transmitter is in blue text.

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1.1 PRODUCT ELEMENTS

The Polar cycling computer package consists of the following parts:

Cycling Computer
The cycling computer displays and records your cycling and exercise data during exercise. Enter your personal settings into the cycling computer and analyze exercise information after workouts.

Polar Bike Mount™
Secure the bike mount to your bike and attach the cycling computer to it.

Polar Speed Sensor™
A wireless speed sensor measures speed and distance during cycling.

Polar Coded Transmitter
CS100 set includes a transmitter. The transmitter sends your heart rate signal to the cycling computer. The electrode areas on the back of the transmitter detect your heart rate.
An elastic strap holds the transmitter around your chest.
The information relevant to using the product with the transmitter is in blue text.

CS100b set does not include a transmitter, but you can buy it as an accessory product.

Polar Web Services
www.polarpersonaltrainer.com is a complete web service tailored to support your training goals. Free registration gives you access to a personalized training program, training diary, useful articles, and much more. In addition, you can get the latest product tips and support online at www.polar.fi.

Customer Service and International Guarantee Information
If your cycling computer needs repair, send it with a Return Card for service to your Polar Service Center. The two-year Polar guarantee is issued to the original customer/purchaser of the product. Please keep the receipt and stamped Polar Customer Service Card. The receipt is your proof of purchase!

The latest version of this user manual can be downloaded at www.polar.fi/support.

1.2 USING YOUR CYCLING COMPUTER FOR THE FIRST TIME

Enter your settings in the Basic Settings mode (time, date, units, and personal settings).

How to enter Basic Settings

Entering accurate personal information ensures that you receive correct feedback based on your performance (calorie consumption, OwnZone determination etc).

Activate the cycling computer by pressing the **MIDDLE** button.
The display fills with numbers and letters.

1. Press the **MIDDLE** button. **BASIC SET** is displayed.
2. Continue by pressing the **MIDDLE** button and follow the steps below:

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
3. **Time Set** • Time Mode 24h / 12h	**RIGHT** • Set 24h or 12h format.	**MIDDLE**
• AM / PM (for 12h format)	**RIGHT** • Set AM or PM.	**MIDDLE**

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
• Hours	**RIGHT** • Set the hours.*	**MIDDLE**
• Minutes	**RIGHT** • Set the minutes.*	**MIDDLE**
4. **Date Set**** • Day / Month	**RIGHT** • Set the day (in 24h format) or the month (in 12h format).*	**MIDDLE**
• Month / Day	**RIGHT** • Set the month (in 24h format) or the day (in 12h format).*	**MIDDLE**
• Year	**RIGHT** • Set the year.*	**MIDDLE**

Note:

- **The numbers scroll faster if you press and hold the **RIGHT** button as you adjust the value.*
- *****The date will be displayed according to the time format selected (24h: day - month - year / 12h: month - day - year).***
- *After a change of battery or after you reset the cycling computer, you only need to set the time and date in the Basic Settings. You can skip the rest of the settings by pressing and holding the **LEFT** button.*

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
5. **Unit** kg/cm or lb/ft	**RIGHT** • Set the units for weight and height: kg/cm or lb/ft.	**MIDDLE**
6. **Weight** kg/lb	**RIGHT** • Set your weight in kilograms or pounds. ***Note:*** *If you chose the wrong units, you can still change them by pressing the* ***LEFT*** *button and returning to step 5.*	**MIDDLE**
7. **Height** cm/ft	**RIGHT** • Set your height in cm or ft. • Set inches (if you chose lb/ft).	**MIDDLE** **MIDDLE**
8. **Birthday** • Day / Month • Month / Day • Year	**RIGHT** • Set the day (in 24h format) or the month (in 12h format). **RIGHT** • Set the month (in 24h format) or the day (in 12h format). **RIGHT** • Set the year.	**MIDDLE** **MIDDLE** **MIDDLE**

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
9. **Sex** Male / Female	**RIGHT** • Set male or female.	**MIDDLE**

- **Settings done** is displayed.
- To change your settings, press the **LEFT** button until you return to the desired setting.
- To accept the settings, press the **MIDDLE** button and the cycling computer goes to the Time mode.

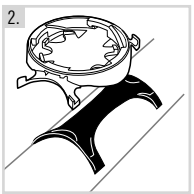
The cycling computer goes to the power save mode (blank screen) by pressing the **LEFT** button or if you do not press any button in the Time mode for five minutes. You can turn the cycling computer on again by pressing any button.

1.3 INSTALLING THE BIKE MOUNT, CYCLING COMPUTER AND SPEED SENSOR

1.3.1 BIKE MOUNT AND CYCLING COMPUTER

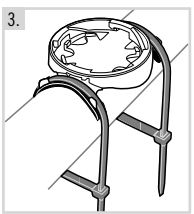
1. You can install the bike mount and the cycling computer on the left or right side of the handlebar or on the stem with cable ties.

2.



2. Place the rubber part on the handlebar or stem and insert the bike mount on top of it.

3.

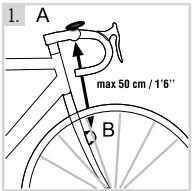


3. Pass the cable ties over the bike mount and adjust them around the handlebar/ stem. Secure the bike mount firmly. Cut off any excess cable tie ends.

4. Position the cycling computer on to the bike mount. Turn the cycling computer clockwise until you hear a click. You can release the cycling computer by pressing it down and simultaneously turning it counter clockwise.

1.3.2 SPEED SENSOR

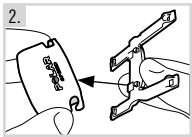
To install the speed sensor and spoke magnet, you need cutters and a small screwdriver.



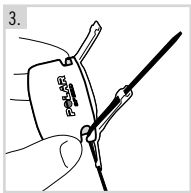
1. Attach the speed sensor to the opposite side of the front fork from the mounted cycling computer. The speed sensor and the cycling computer should be no more than 30-40 cm/ 1'-1'3" apart.

In case, the cycling computer is attached to the stem or if you are exercising in surroundings with electromagnetic interference, the distance should be minimized (minimum 30 cm/1'). The speed sensor and cycling computer should form approximately a 90° angle.

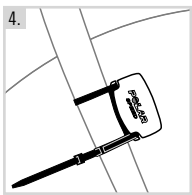
Should the distance between the cycling computer and the speed sensor be longer than recommended (for example on mountain bikes due to the front suspension), the speed sensor could be attached on the same side of the front fork as the cycling computer. In this case the maximum distance is 50 cm/1´6".



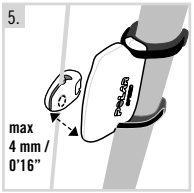
2. Attach the rubber part to the sensor.



3. Pass the cable ties through the speed sensor and rubber part holes.



4. Adjust the sensor to the front fork so that the POLAR logo faces outwards. Adjust the ties loosely. **Do not tighten them fully yet.**



5. Attach the magnet to a spoke at the same level as the sensor. The magnet hole must be facing the speed sensor. Fasten the magnet to the spoke and tighten it loosely with a screwdriver. Do not tighten it fully yet.

Fine-tune the positioning of both the magnet and the speed sensor so that the magnet passes close to the sensor but does not touch it. Adjust the sensor towards the wheel/ spokes as much as possible. The gap between the sensor and the magnet should be under 4 mm/0'16". The gap is correct when you can fit a cable tie just about between the magnet and the sensor.

Rotate the front tyre so that you can see a speed reading on the display of your cycling computer. The reading indicates that the magnet and the speed sensor are positioned correctly. Once the magnet and the speed sensor are positioned correctly, tighten the screw to the magnet with a screwdriver. Also tighten the cable ties securely and cut off any excess cable tie ends.

Your safety is important to us. While riding your bike, please keep your eyes on the road to prevent any accidents and injury. Check that you can turn the handlebar normally and that the cable wires for brakes or gearing do not catch on the bike mount or the speed sensor. Check also that the bike mount or speed sensor does not hamper pedaling or the use of brakes or gearing.

Before you start cycling, you should set the wheel size of your bicycle into the cycling computer. For further information see pages 39-42.

1.4 WEARING YOUR TRANSMITTER

Coded heart rate transmission reduces interference from other heart rate monitors that are close by. To make sure that the code search is successful and to ensure trouble-free heart rate monitoring, **keep the cycling computer within 1 meter/ 3 feet of your transmitter.** Check that you are not near other people with heart rate monitors or any source of electromagnetic disturbance. For further information on interference, see Precautions on page 53.

To measure your heart rate, you need to wear the transmitter.

1. Attach one end of the transmitter to the elastic strap.

2. Adjust the strap length to fit snugly and comfortably. Secure the strap around your chest, just below the chest muscles, and buckle the strap to the transmitter.

3. Lift the transmitter off your chest and moisten the two grooved electrode areas on the back.

4. Check that the wet electrode areas are firmly against your skin and that the Polar logo is in a central, upright position.

See the following chapter for how to start measuring your heart rate.

2.1 EXERCISE RECORDING AND HEART RATE MEASURING

You can record one Exercise File. There are two ways to start exercise recording. If you turn on the AutoStart function, the cycling computer automatically starts and stops exercise recording when you start and stop cycling. If the AutoStart function is off, you can start exercise recording by pressing the **MIDDLE** button. For further information on AutoStart and how to set the function on/off, see pages 39-40.

Starting exercise without the transmitter:	**Starting exercise with the transmitter:**
1. Attach the bike mount and speed sensor on your bicycle according to the instructions on pages 12-14. 2. Set your cycling computer on to the mounted bike mount. 3. Activate your blank cycling computer by pressing the **MIDDLE** button. Before you start cycling, wait for 15 seconds until the framed heart symbol ♡ disappears from the Time mode display. Now the computer is ready to record your exercise. 4. If you have turned **AutoStart on**, your speed appears on the display when you start cycling. If you have turned **AutoStart off**, you can start exercise recording by pressing the **MIDDLE** button and your speed appears on the display. Your exercise time also starts running. 5. If you have turned **AutoStart on**, the cycling computer automatically stops exercise recording when you stop cycling. If **AutoStart is off**, you can stop the exercise by pressing the **LEFT** button twice. For further information on Stopping the exercise, see page 22.	1. Wear the transmitter as described in the section *"Wearing your Transmitter"* on page 15. Attach the bike mount and speed sensor on your bicycle according to the instructions on pages 12-14. 2. Activate your blank cycling computer by pressing the **MIDDLE** button and start from the Time mode. The cycling computer will automatically read your heart rate. Wait until the computer detects your heart rate and the framed, flashing heart symbol ♥ appears on the display in 15 seconds.* Exercise time is not recorded yet. 3. Set your cycling computer on to the mounted bike mount. If you have turned **AutoStart on**, your heart rate value and speed appear on the display when you start cycling. If you have turned **AutoStart off**, you can start exercise recording by pressing the **MIDDLE** button and your heart rate value and speed appear on the display. Your exercise time also starts running. 4. If you have turned **AutoStart on**, the cycling computer automatically stops exercise recording when you stop cycling. If **AutoStart is off**, you can stop the exercise by pressing the **LEFT** button twice. For further information on Stopping the exercise, see page 22.

- If your heart rate is not displayed and 00 appears on the display, the heart rate detection has stopped. Bring the cycling computer near the Polar logo on the transmitter to restart the heart rate detection. No button press is needed.
- If **OwnZone®** is selected, the OwnZone determination procedure begins when exercise recording starts. For further information, see the section OwnZone on page 36.
- To skip the OwnZone determination and use the previously determined OwnZone, press the **MIDDLE** button when OwnZone symbol 02▶_____ appears on the display. If you have not determined your OwnZone before, your age-based heart rate limits will be used.

Note: * ♥ *A frame around the heart rate symbol indicates a coded heart rate transmission.*

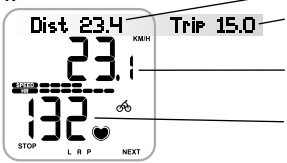
- *If the cycling computer does not display your heart rate, make sure that the transmitter electrodes are moist and that the strap is snug enough.*

2.2 FUNCTIONS DURING EXERCISE

Note: *Your exercise information is saved only if the stopwatch, i.e. your exercise duration, has been running for more than one minute* ***or*** *at least one lap has been stored.*

Changing the display information: Press the **RIGHT** button to view the following options during exercise:

1.



Ridden distance alternates with trip distance when you have taken at least one lap time.

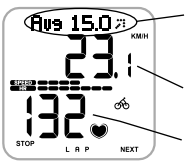
Trip distance is reset to zero each time you take a lap time by pressing the **MIDDLE** button.

Riding speed (km/h or m/h)

Heart rate. If there is no heart rate reading or you have not set your user information, the speed is displayed instead.

SPEED HR Speed and heart rate are also displayed graphically. The more bars are displayed, the higher your heart rate or speed and vice versa. One speed bar represents 5 km/h or 3 mph, and when all ten bars are displayed your speed is 50 km/h or 30 mph or higher.

2.



Average speed rise ↗ or drop ↘ indicator.

Speed

Heart rate

Note: *You can also press and hold the* ***RIGHT*** *button to set the computer to browse the views automatically. Scrolling can be turned off by pressing and holding the* ***RIGHT*** *button.*

3.

The kilocalories you have burned so far. The cumulation of kilocalories starts as your heart rate is displayed. If there is no heart rate reading or you have not set your user information, the speed is displayed instead of calorie information.

Stopwatch, i.e., exercise duration.

Heart rate

4.

The estimated time of arrival, or if the riding distance function is off, the speed is displayed instead. If you set the distance you are going to ride, the cycling computer estimates your arrival time to the destination according to your riding speed. For further information, see page 31.

Time of day

Heart rate

5.

Heart rate limits: On the left, you can see your lower heart rate limit and on the right your upper heart rate limit. The heart rate symbol moves left or right according to your heart rate. If the heart symbol is not visible, it means your heart rate is either below the flashing lower heart rate limit or above the flashing upper heart rate limit. In this case an alarm goes on, provided the sounds are turned on. If there is no heart rate reading, the limits are not displayed. For further information, see page 34.

Time you have exercised in target zone, i.e., within the heart rate limits.

Heart rate

Target Zone Alarm: With the Target Zone Alarm you can make sure you exercise at the right intensity. When the target zone heart rate limits are activated, the cycling computer sounds an alarm if you are above or below your heart rate limits. You can set the limits for your target zone in the Settings/Limits SET menu. For further information, see page 34.
If you are out of your target zone, the heart rate value starts flashing and the cycling computer beeps with each heartbeat.

The symbol in the upper right corner of the display indicates that the Target Zone Alarm sound is activated. Note that the button sounds can also be set on/off in the Settings mode. To turning the sounds on or off, see page 48.

Note: *When heart rate limits are not activated, no Target Zone Alarm in the exercise recording will sound, nor will target zone information be placed in the Summary File or File.*

Storing Lap and Split Time: Press the **MIDDLE** button to store lap and split time.
Lap time indicates elapsed time for one lap. **Split time** is elapsed time from the beginning of the exercise until storing a lap time (for example from the beginning of the exercise until the 4th lap was stored).

Note:

- *If you have activated the AutoLap function in the Settings mode, your cycling computer automatically records laps when you reach the set distance, e.g., every kilometer or mile. For further information, see page 31.*
- *You can store up to 50 lap times. When the lap memory is full, **LapTime FULL** text will be displayed. You can take lap times during your exercise, but they are no longer recorded.*

Timers: The timers of your cycling computer work during your exercise recording. The cycling computer beeps and shows when the timer time matches. If only timer 1 is on, the same timer beeps always after the set time has elapsed during your exercise. If timer 2 is also on, the timers alternate during your exercise. For further information, see page 33.

Pausing Exercise:

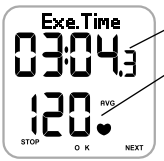
1. Press the **LEFT** button. Exercise recording, stopwatch, and other calculations are paused.
2. To continue, press the **MIDDLE** button.

Exercising in the dark: If you activate the backlight by pressing and holding the **MIDDLE** button during an exercise recording, the backlight will reactivate automatically during the same exercise every time you press any button.

Note: *If the maximum file recording time (99 hours 59 min 59 s) is exceeded, the cycling computer beeps, pauses recording and displays* ***HALT****. Stop recording by pressing the* ***LEFT*** *button.*

2.3 STOPPING THE EXERCISE AND VIEWING SUMMARY FILE

1. Press the **LEFT** button to pause the exercise recording. **Paused** is displayed.
2. Press the **LEFT** button. **Summary FILE** is displayed and the following information starts automatically scrolling:

Recorded Exercise File Information	
	Duration of recorded exercise. Average heart rate.
Limits	Heart rate limits used during your exercise (if limits are set).
In Zone	Time spent in target heart rate zone.
Kcal	Kilocalories burnt during exercise.
AvgSpeed	Average speed.
Avg Cad.	Average cadence.*
Distance	Ridden distance.
RideTime	Time used for cycling. E.g., if you stop cycling but do not stop the exercise recording the cycled time counting will automatically stop, but the exercised time will continue to elapse. If the AutoStart function is activated, the exercise and cycled time is the same, because the cycling computer automatically starts and stops the recording as you start and stop cycling.

**Optional Polar Cadence Sensor required.*

3. VIEWING RECORDED INFORMATION - FILE

Press **MIDDLE**

- **Date/Time**

Press **RIGHT**

- **Exe.Time/Avg HR/Max HR**

Press **RIGHT**

- **Limits**

Press **RIGHT**

- **In/Above/Below Zone**

Press **RIGHT**

- **Kcal**

Press **RIGHT**

- **Distance**

Press **RIGHT**

- **Avg/MaxSpeed**

Press **RIGHT**

- **Avg/Max.Cad***

Press **RIGHT**

- **RideTime**

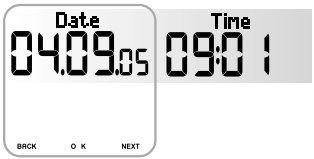
Press **RIGHT**

- **Laps**

The Exercise File allows you to review cycling and exercise information collected while recording an exercise session. The cycling computer starts recording information in a File as soon as you start recording by pressing the **MIDDLE** button or using AutoStart function. Your exercise information is saved only if the stopwatch has been on for more than one minute **or** at least one lap has been stored.

Viewing Exercise File

1. In the Time mode, press the **RIGHT** button. **FILE** is displayed.
2. Press the **MIDDLE** button. **Date** and **Time** alternate on the display.

Recorded Exercise File Information	
	The date and time when the exercise started alternate on the display.

**Optional Polar Cadence Sensor required.*

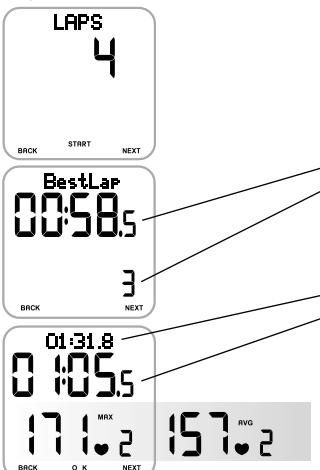
3. Press the **RIGHT** button to browse through the recorded information.

Recorded Exercise File Information	
Exe.Time	Duration of recorded exercise.
Avg HR / Max HR	The average heart rate and maximum heart rate alternate in heartbeats per minute (bpm). ***Note:*** *If you set heart rate limits in percentages of your maximum heart rate, these values are displayed also as percentages of your maximum heart rate (%).*
Limits	The heart rate limits (in bpm or %) used during the exercise (if limits are set).
In/Above/Below Zone	The exercise time that you have spent within (In Zone), above and below your target zone limits (if limits are set) alternate on the display.
Kcal	Expended kilocalories during the exercise.
Distance	Ridden distance.
AvgSpeed Max	Average and maximum speed.

Note:

- *The alternating information switches automatically on the display. For quick scrolling, press the **MIDDLE** button.*
- *Press and hold the **MIDDLE** button to turn the backlight on in the File mode.*

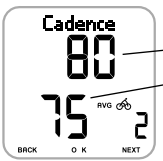
Recorded Exercise File Information	
Avg Cad. **Max**	Average and maximum cadence.*
RideTime	Time used for cycling.
LAPS	Number of laps while exercising. ***Note:*** *Lap information is displayed if you have stored at least one lap during your exercise.* 4. To view the best lap, press the **MIDDLE** button. The **best lap** information is displayed: The fastest lap time. The number of the best lap. 5. Browse the laps with the **RIGHT** button. By pressing the **MIDDLE** button you can browse the following lap information: Split time. Lap time. The maximum heart rate and the average heart rate during the lap alternate on the display. ***Note:*** *The last lap is automatically recorded when the exercise has been stopped by pressing the **LEFT** button, but it is never the best lap.*



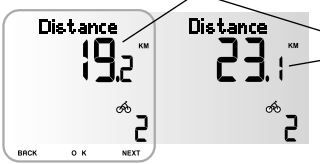
**Optional Polar Cadence Sensor required.*

Recorded Exercise File Information

Speed
The speed when you recorded the lap.
Average speed during the lap.



Cadence*
The cadence when you recorded the lap.
Average cadence during the lap.



Distance
The Lap and
Split distances alternate on the display.

- To return to the Time mode, press and hold the **LEFT** button.

**Optional Polar Cadence Sensor required.*

4. TOTAL VALUES

Press **MIDDLE**

- **Today's TOTALS**

Press **RIGHT**

- **ThisWeek TOTALS**

Press **RIGHT**

- **Season's TOTALS**

Total values include cumulative and maximum values of information recorded during your training sessions. Use the Total values file as a daily and weekly counter of your training values. The values are updated automatically, when exercise recording is stopped.
In addition to the daily and weekly values, you can view the seasonal cumulative and maximum values. These values are collected until you reset them, which means that you can use this function for example as a monthly counter of your training values. For further information on how to reset the values, see page 30.

- **Today's TOTALS** The cycling computer automatically resets the total values to zero at midnight (00:00).
- **ThisWeek TOTALS** The cycling computer automatically resets the total values to zero between Sunday and Monday at midnight (00:00).
- **Season's TOTALS** Reset the total values to zero by yourself whenever you want.

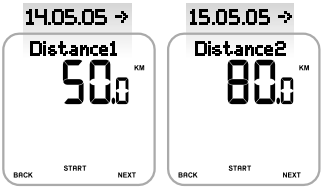
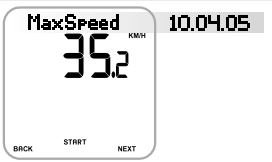
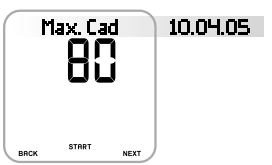
Viewing the Total Values

1. In the Time mode, press the **RIGHT** button until **TOTALS** is displayed.
2. Press the **MIDDLE** button. **Today's TOTALS** is displayed.
3. Select the time scale (**Today's, ThisWeek or Season's**) you want to view with the **RIGHT** button.
4. Press the **MIDDLE** button. **Tot.Time** and the total time are displayed.
5. If you choose **Today's TOTALS** or **ThisWeek TOTALS** you can use the **RIGHT** button to browse through following information: Tot.Time, Tot.Kcal, Distance1, Distance2*, MaxSpeed, Max.Cad** and RideTime.

**You need to do bike settings to see values for bike 1 and bike 2.*
***Optional Polar Cadence Sensor required.*

6. If you choose **Season's TOTALS** you can use the **RIGHT** button to browse through following information:

Total Values	
10.04.05 →	The date when cumulation started. Total cumulative exercise duration.
10.04.05 →	The date when cumulation started. Total cumulative burned kilocalories.
10.04.05 → 10.04.05 → 15.05.05 →	The date when cumulation started. Odometer alternates with the date when cumulation started and the cumulation for both bike 1 and bike 2. ***Note:*** *The odometer measures the cumulative ridden distance and it can only be reset by using the UpLink. For further information, see page 49.*

Total Values	
	The date when cumulation started. The ridden distance cumulation for bike 1 and bike 2 (Distance1 is updated when bike 1 is used and Distance2 is updated when bike 2 is used).
	The date when updated. Maximum speed of the season.
	The date when updated. Maximum cadence of the season.*

**Optional Polar Cadence Sensor required.*

Total Values	
	The date when cumulation started. Total cumulative ridden duration.

- To return to the Time mode, press and hold the **LEFT** button.

Resetting Season's TOTALS or Returning the Previous Maximum Speed or Cadence* Value

Use Total values as a seasonal (or daily/weekly) counter of your exercise values by resetting them once a season. Instead of resetting, you can return the previous maximum speed and cadence* value. Once reset or returned, a value cannot be retrieved.

Start with any display in the previous table (Tot.Time, Tot.Kcal, Distance1/2, MaxSpeed, Max.Cad*, RideTime).

1. Press the **MIDDLE** button to start resetting the desired value. **Reset?** is displayed. In MaxSpeed and Max.Cad* displays you can continue by pressing the **RIGHT** button to return the previous value. Select **Return Old** using the **MIDDLE** button.
2. Press the **MIDDLE** button. **Are You Sure** is displayed.
3. If sure, press the **MIDDLE** button.

Alternatively, to cancel the reset, press the **LEFT** button.

- To return to the Time mode, press and hold the **LEFT** button.

Note: *The odometer can be reset only by using the UpLink. For further information, see page 49.*

**Optional Polar Cadence Sensor required.*

Press **MIDDLE**

- **Cycling SET**

Press **RIGHT**

- **Timer SET**

Press **RIGHT**

- **Limits SET**

Press **RIGHT**

- **Bike SET**

Press **RIGHT**

- **Watch SET**

Press **RIGHT**

- **User SET**

Press **RIGHT**

- **General SET**

You can view or change the settings in the Settings menu.

Tip: Settings can also be configured using the Polar UpLink Tool™. They can then be transferred to your cycling computer from your PC. For further information, see page 49.

To set values:

- Adjust or select a value with the **RIGHT** button.
- Accept your selection and proceed in the menu with the **MIDDLE** button.
- Cancel your selection or return to the previous mode or menu by pressing the **LEFT** button.

5.1 RIDING DISTANCE FOR ESTIMATED TIME OF ARRIVAL FUNCTION AND AUTOMATIC LAP RECORDING SETTINGS (CYCLING SET)

In the cycling settings you can make two different settings:

- **RideDist:** Setting riding distance.
  Set the distance you are going to ride and the cycling computer will estimate your arrival time to the destination according to your riding speed.
- **AutoLap:** Automatic lap recording.
  Set the distance for the automatic lap and the cycling computer will record the lap information every time you reach this distance. For example, if you set 1 km/m, the cycling computer will record lap information every kilometer or mile.

Both functions work during your exercise recording. For further information, see pages 18-20.

1. In the Time mode, press the **RIGHT** button until **SETTINGS** is displayed.
2. Press the **MIDDLE** button. **Cycling SET** is displayed.
3. Continue by pressing the **MIDDLE** button and follow the steps below:

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
4. **RideDist** **On / OFF**	**RIGHT** • Turn the riding distance function on or off.	**MIDDLE** (Skip step 5, if you turned the function off)
5. **RideDist** **On**	**RIGHT** • Adjust the kilometers or miles.	**MIDDLE**
6. **AutoLap** **On / OFF**	**RIGHT** • Turn the automatic lap recording function on or off.	**MIDDLE** (Skip step 7, if you turned the function off)
7. **AutoLap** **On**	**RIGHT** • Adjust the kilometers or miles.	**MIDDLE**

- To return to the Time mode, press and hold the **LEFT** button.

5.2 TIMER SETTINGS (TIMER SET)

Your cycling computer is equipped with two alternating timers. The timers work during your exercise recording.

Tip: Use the timers for example as a reminder to drink at certain intervals or as a training tool in interval training, so that you know when to switch from a harder to a lighter period and vice versa.

1. In the Time mode, press the **RIGHT** button until **SETTINGS** is displayed.
2. Press the **MIDDLE** button. **Cycling SET** is displayed.
3. Press the **RIGHT** button. **Timer SET** is displayed.
4. Continue by pressing the **MIDDLE** button and follow the steps below:

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
5. **Timer 1** **On / OFF**	**RIGHT** • Turn the Timer on or off.	**MIDDLE** (Skip step 6, if you turned the function off)
6. **Timer 1** **On**	**RIGHT** • Adjust the minutes (0-99 minutes). **RIGHT** • Adjust the seconds (0-59 seconds).	**MIDDLE** **MIDDLE**

- To set timer 2, repeat steps 5 and 6.
- To return to the Time mode, press and hold the **LEFT** button.

5.3 HEART RATE LIMITS SETTINGS (LIMITS SET)

In the heart rate limits settings (Limits SET) you can choose the heart rate limit type:

- **Manual Limits:** You can create a target heart rate zone by setting the upper and the lower heart rate limits manually.
- **OwnZone:** The cycling computer is able to determine your individual aerobic (cadiovascular) exercise heart rate zone automatically. This is called OwnZone (OZ). OwnZone ensures that you exercise within safe limits. For further information, see page 36.
- **Limits Off:** You can also deactivate target zone limits, when there are no target heart rate limits during the exercise recording, and no target heart rate zone values (In Zone) are calculated in the summary File or File.

Use OwnZone or the target heart rate zone to maintain a particular level of intensity, depending on your objectives.

1. In the Time mode, press the **RIGHT** button until **SETTINGS** is displayed.
2. Press the **MIDDLE** button. **Cycling SET** is displayed.
3. Press the **RIGHT** button until **Limits SET** is displayed.

4. Continue by pressing the **MIDDLE** button and follow the steps below:

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
5. **TYPE** **Manual / OwnZone / Off**	**RIGHT** • Select Manual or OwnZone (automatic definition of your personal heart rate zone) or Off.	**MIDDLE** (Skip steps 6-8, if you turned the function off)
6. **HR / HR%** **SET**	**RIGHT** • Select heart rate displayed as beats per minute (bpm) or as % of your maximum heart rate (% HR_{max}).	**MIDDLE** (Skip steps 7-8, if you chose OwnZone)
7. **HighLimit**	**RIGHT** • Adjust the upper heart rate limit.	**MIDDLE**
8. **LowLimit**	**RIGHT** • Adjust the lower heart rate limit.	**MIDDLE**

- To return to the Time mode, press and hold the **LEFT** button.

5.3.1 OWNZONE

The Polar cycling computer is able to determine your individual aerobic (cardiovascular) exercise heart rate zone automatically. This is called OwnZone (OZ).

OwnZone is based on measuring changes in heart rate variability during your warm up. Heart rate variability reflects changes in your physiology. For most adults OwnZone corresponds to 65-85 % of maximum heart rate. OwnZone can be determined in 1-5 minutes during a warm-up period by cycling, walking or jogging. OwnZone may be easier to find during indoor cycling than outdoor cycling because the speed is easier to control. The main idea is that you start exercising slowly at a light intensity, i.e., heart rate lower than 100 bpm/50 % HR_{max}. You then gradually increase the intensity of your exercise to raise your heart rate as smoothly as possible. Using OwnZone makes exercise easier and more enjoyable.

OwnZone has been developed for healthy people. Some health conditions may cause heart rate variability based OwnZone determination to fail, for example high blood pressure, some cardiac arrhythmias, and some medications.

Determining Your OwnZone Heart Rate Limits

Before you start to determine your OwnZone, make sure of the following:

- You have entered your user settings correctly. The cycling computer will ask for missing information (for example date of birth) before accepting limit settings.
- You have activated the OwnZone limits. With the OwnZone function on, the cycling computer will automatically determine your OwnZone every time you start recording an exercise session.

You should redefine your OwnZone:

- when changing your exercise environment or exercise mode;
- if you are returning to exercise after a more than one week off;
- if you feel unusual about the physical state of your body when starting to exercise. For example you are stressed, not recovered from the previous training or not feeling well;
- after changing your settings.

1. Start from the Time mode and press the **MIDDLE** button. The OwnZone symbol OZ ▸ _ _ _ _ _ appears on the display. If you want to skip OwnZone determination and use the previously determined OwnZone, press the **MIDDLE** button.

2. OwnZone determination starts. Determination of your OwnZone happens in five stages.

OZ ▸ _ _ _ _ _ Cycle or walk at a slow pace for 1 min. Keep your heart rate below 100 bpm/ 50 % HR_{max} during this first stage. After each stage you will hear a beep (if the sound settings are on) and the display automatically illuminates (if you have switched the backlight on once before), indicating the end of the stage.

OZ ▸▸ _ _ _ _ Cycle or walk at a normal pace for 1 min. Slowly increase your heart rate by 10-20 bpm/ 5 % HR_{max}.

OZ ▸▸▸ _ _ _ Cycle or walk at a brisk pace for 1 min. Slowly increase your heart rate by 10-20 bpm/ 5 % HR_{max}.

OZ ▸▸▸▸ _ _ Cycle at a brisk pace or jog at a slow pace for 1 min. Slowly increase your heart rate by 10-20 bpm/ 5 % HR_{max}.

OZ ▸▸▸▸▸ _ Cycle or jog at a brisk pace or run for 1 min.

3. At some point during the stages, you hear two beeps. Your OwnZone has been determined. If the determination was successful, **OwnZone** and **Updated** alternate with the heart rate limits on the display. The limits are displayed as beats per minute (bpm) or as a percentage of your maximum heart rate (%HR_{max}) depending on your settings.

4. If the determination was not successful, your previously determined OwnZone limits will be used and **OwnZone** appears with the limits on the display. If you are determining your OwnZone for the first time, then the limits based on your age will be used.

You can now continue with your exercise. Try to stay within the given heart rate zone to maximize exercise benefits.

For further information on OwnZone, see www.polar.fi.

5.4 BICYCLE SETTINGS (BIKE SET)

You can set two bike preferences for the cycling computer. Prepare the settings for both bikes; when you start exercise recording, just select bike 1 or 2. For both bikes you can prepare the following settings:

- **AutoStart on/off** The AutoStart function starts or stops automatically the exercise recording when you start or stop cycling.
- **Cadence on/off** A wireless cadence sensor measures the speed at which you turn the pedals of your bicycle. An optional Polar Cadence sensor is required.
- **Wheel** Wheel size settings are a prerequisite for cycling information. For further information, see the following page.

1. In the Time mode, press the **RIGHT** button until **SETTINGS** is displayed.
2. Press the **MIDDLE** button. **Cycling SET** is displayed.
3. Press the **RIGHT** button until **Bike SET** is displayed.

4. Continue by pressing the **MIDDLE** button and follow the steps below:

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
5. **Bike 1 / 2**	**RIGHT** • Select which bike settings you want to set: bike 1 or 2.	**MIDDLE**
6. **AutoStart On / OFF**	**RIGHT** • Turn AutoStart function on or off.	**MIDDLE**
7. **Cadence* On / OFF**	**RIGHT** • Turn cadence function on or off.	**MIDDLE**
8. **Wheel**	**RIGHT** • Adjust the wheel size (mm) of your bicycle.	**MIDDLE**

- To return to the Time mode, press and hold the **LEFT** button.

Note:

- *The wheel size is always indicated in millimeters, as it is more accurate.*
- *The speed and distance measuring functions are always on.*

**Optional Polar Cadence Sensor required.*

You have the following alternatives for finding out the wheel size of your bike:*

METHOD 1.
Look at the wheel of your bike and find the wheel diameter printed on it.
On the chart below, find your wheel diameter in inches or in ETRTO reading and match it to the wheel size in millimeters on the right.

ETRTO	Wheel size diameter (inches)	Wheel size setting (mm)
25-559	26 x 1.0	1884
23-571	650 x 23C	1909
35-559	26 x 1.50	1947
37-622	700 x 35C	1958
47-559	26 x 1.95	2022
20-622	700 x 20C	2051
52-559	26 x 2.0	2054
23-622	700 x 23C	2070
25-622	700 x 25C	2080
28-622	700 x 28	2101
32-622	700 x 32C	2126
42-622	700 x 40C	2189
47-622	700 x 47C	2220

Note: **Wheel sizes on the above chart are advisory as wheel size depends on the wheel type and air pressure.*

METHOD 2.

Mark the tread of the front tire with a line and roll the tire perpendicular to the ground. You can also use the valve as a mark. Mark a line on the ground. Move your bike on a flat surface straight ahead for one complete wheel rotation. Check that the tire is perpendicular to the ground. Draw another line on the ground exactly where the mark on the front tire touches the ground.

_____ mm	Measure the distance between the two lines on the ground.
-4 mm	Subtract 4 mm to account for your weight on the bike to get your wheel circumference.
_____ mm	This is the value you must set on the cycling computer.

5.5 WATCH SETTINGS (WATCH SET)

In the Watch SET menu, you can change the time of day and date settings.

1. In the Time mode, press the **RIGHT** button until **SETTINGS** is displayed.
2. Press the **MIDDLE** button. **Cycling SET** is displayed.
3. Press the **RIGHT** button until **Watch SET** is displayed.
4. Continue by pressing the **MIDDLE** button and follow the steps below:

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
5. **Time** • **Time Mode 24h/12h**	**RIGHT** • Set 24h or 12h time mode.	**MIDDLE**
• **AM / PM** (if you use 12h format)	**RIGHT** • Set AM or PM.	**MIDDLE**
	RIGHT • Set the hours.	**MIDDLE**
	RIGHT • Set the minutes.	**MIDDLE**

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
6. **Date*** • **Day / Month**	**RIGHT** • Set the day (in 24h mode) or the month (in 12h mode).	**MIDDLE**
• **Month / Day**	**RIGHT** • Set the month (in 24h mode) or the day (in 12h mode).	**MIDDLE**
• **Year**	**RIGHT** • Set the year.	**MIDDLE**

- To return to the Time mode, press and hold the **LEFT** button.

Note: **The order in which you set date settings depends on which time mode you have chosen (24h: day - month - year / 12h: month - day - year).*

5.6 PERSONAL INFORMATION SETTINGS (USER SET)

Entering your personal information ensures that your calorie counter operates with the highest possible degree of accuracy.

1. In the Time mode, press the **RIGHT** button until **SETTINGS** is displayed.
2. Press the **MIDDLE** button. **Cycling SET** is displayed.
3. Press the **RIGHT** button until **User SET** is displayed.
4. Continue by pressing the **MIDDLE** button and follow the steps below:

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
5. **Weight kg/lb**	**RIGHT** • Set your weight in kilograms or pounds.	**MIDDLE**
6. **Height cm/ft**	**RIGHT** • Set your height in cm or ft. • Set inches (if you chose lb/ft).	**MIDDLE** **MIDDLE**

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
7. **Birthday** • **Day / Month**	**RIGHT** • Set the day (in 24 h mode) or the month (in 12 h mode).	**MIDDLE**
• **Month / Day**	**RIGHT** • Set the month (in 24h mode) or the day (in 12h mode).	**MIDDLE**
• **Year**	**RIGHT** • Set the year.	**MIDDLE**
8. **HR Max**	**RIGHT** • Adjust HR_{max}, if you know your **laboratory measured current maximum heart rate value**. Your age-predicted maximum heart rate value (220-age) is displayed as a default setting when you set this value for the first time.	**MIDDLE**
9. **HR Sit**	**RIGHT** • Adjust your heart rate value in a sitting position (see the instructions on the next page).	**MIDDLE**
10. **Sex** • **Male / Female**	**RIGHT** • Set male or female.	**MIDDLE**

- To return to the Time mode, press and hold the **LEFT** button.

Maximum heart rate value (HR_{max})

HR_{max} is used to estimate energy expenditure. HR_{max} is the highest number of heartbeats per minute during maximum physical exertion. HR_{max} is also useful when determining exercise intensity. The most accurate method for determining your individual HR_{max} is to perform a maximal exercise stress test in a laboratory.

Heart rate value in a sitting position (HR_{sit})

HR_{sit} is used to estimate energy expenditure. HR_{sit} should be your typical heart rate when you are not doing any physical activity (while sitting). To determine your HR_{sit} easily, wear your transmitter, hold your cycling computer in your hand, sit down and do not engage in any physical activity. After two or three minutes, press the **MIDDLE** button in the Time mode to view your heart rate. This is your HR_{sit}.

To calculate your HR_{sit} more precisely, repeat the procedure several times and calculate your average.

5.7 CYCLING COMPUTER SOUNDS AND UNITS SETTINGS (GENERAL SET)

You can view and change the following settings in the General SET:

- **Sounds** Activity sounds for the cycling computer on or off .
- **KeySound** Button sounds for the cycling computer on or off.
- **Units** The Unit settings affect the personal information and watch settings.

1. In the Time mode, press the **RIGHT** button until **SETTINGS** is displayed.
2. Press the **MIDDLE** button. **Cycling SET** is displayed.
3. Press the **RIGHT** button until **General SET** is displayed.
4. Continue by pressing the **MIDDLE** button and follow the steps below:

The display reads:	Press the RIGHT button to set the flashing value	Press the MIDDLE button to accept the value
5. **Sound** **On / OFF**	**RIGHT** • Turn activity sounds on or off.	**MIDDLE**
6. **KeySound** **On / OFF**	**RIGHT** • Turn button sounds on or off.	**MIDDLE**
7. **kg/cm or lb/ft** **Unit**	**RIGHT** • Select kg/cm or lb/ft units.	**MIDDLE**

- To return to the Time mode, press and hold the **LEFT** button.

6. EDIT YOUR CYCLING COMPUTER SETTINGS WITH A COMPUTER

The Polar cycling computer offers you the option of editing your cycling computer settings with the Polar UpLink Tool and your computer. You can also personalize the display of your cycling computer by downloading logos. For this you need the Polar UpLink Tool.

You can download the Polar UpLink Tool at www.polar.fi or www.polarpersonaltrainer.com. In order to be able to use the Polar UpLink Tool, you need a computer with a sound card and dynamic loudspeakers or headphones. For further information on system requirements, see the chapter Technical Specifications. See www.polar.fi or www.polarpersonaltrainer.com for further instructions.

7. CARE AND MAINTENANCE

Like any electronic device, your Polar cycling computer should be treated with care. The suggestions below will help you to fulfill guarantee obligations and enjoy this product for many years to come.

Taking Care of Your Cycling Computer

- The cycling computer and speed sensor are water resistant, so you can use them in the rain. To maintain the water resistance, do not wash the cycling computer or the speed sensor with a pressure washer or sink them under water.
- Store your cycling computer and transmitter in a cool and dry place. Do not store them in a damp environment, in non-breathable material (such as a plastic bag or a sports bag) or with conductive material such as a wet towel. Sweat and moisture can keep the transmitter electrodes wet and the transmitter activated, shortening battery life.
- Keep your cycling computer clean. Clean it and speed sensor with a mild soap and water solution and in the end rinse them with clean water. Do not immerse them in water. Dry them carefully with a soft towel. Never use alcohol or any abrasive material such as steel wool or cleaning chemicals.
- The operating temperatures of cycling computer and speed sensor are -10 °C to +50 °C / +14 °F to +122 °F.
- Wash the transmitter regularly after use with a mild soap and water solution and a soft brush if needed. Do not dry the transmitter with anything other than a soft towel. Mishandling may damage the electrodes.
- Do not bend or stretch the transmitter. This may damage the electrodes.
- Avoid hard hits to the speed sensor as these may damage the sensor.
- Do not expose the cycling computer to direct sunlight for extended periods, such as by leaving it in a car or mounted on the bike mount.

Service

During the two-year guarantee/warranty period we recommend that you service the product at an authorized Polar Service Center only. The warranty does not cover damage or consequential damage caused by service not authorized by Polar Electro.

Transmitter and Speed Sensor Battery

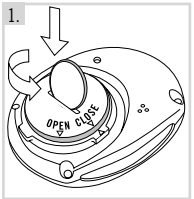
Contact your authorized Polar Service Center for a replacement transmitter or speed sensor.

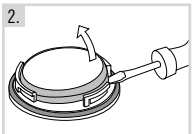
Cycling Computer Battery

We recommend that you have the battery replaced by an authorized Polar Service Center. Avoid opening the sealed battery cover, but if you choose to change the battery yourself, follow the instructions on the next page.

Note: *In order to ensure the maximum lifespan of the battery cover, open it only when you need to change the battery.*

- *The low battery indicator and **LowBatt**. is displayed when 10-15% of the cycling computer battery capacity is left and the battery should be replaced. The backlight and cycling computer sounds are automatically deactivated when is displayed.*
- *Excessive use of the backlight drains the cycling computer's battery more rapidly.*
- *In cold conditions the low battery indicator may appear, but the indicator disappears when you return to warmer temperature.*





To change the cycling computer battery, you need a small screwdriver, coin and battery (CR 2032).

1. Using a coin that sits tight into the back cover groove, open the battery cover by pressing slightly and unscrewing counter clockwise.
2. Remove the battery cover. The battery is attached to the cover, which should be carefully lifted using a screwdriver. Remove the battery and replace with a new one. Be careful not to damage the threads of the back cover.
3. Place the negative (-) side of the battery against the cycling computer and the positive (+) side against the cover.
4. The sealing ring of the battery cover is also attached to the cover. Only replace the sealing ring if it is damaged. Before closing the battery cover, make sure that the cover's sealing ring is undamaged and it is placed correctly in its groove.
5. Put the battery cover in its place and close it by screwing the cover clockwise with a coin. Make sure that the cover is closed properly!

Note:

- *If used according to the manufacture's instructions, the battery's sealing ring will last for the cycling computer's operating life. However, if the sealing ring is damaged we recommend that you contact a Polar Service Center. Replacement sealing rings are only available from an authorized Polar Service Center.*
- *After a battery change re-enter time and date settings in the Basic Settings. For further information, see page 8.*
- *Keep the batteries away from children. If swallowed, contact a doctor immediately.*
- *Batteries should be disposed of properly according to local regulations.*

8. PRECAUTIONS

The Polar cycling computer shows your performance indicators. It indicates the level of physiological strain and intensity during your exercise. It also measures speed and distance when cycling with a Polar speed sensor. No other use is intended or implied.

Electromagnetic Interference

Disturbances may occur near high voltage power lines, traffic lights, overhead lines of electric railways, electric bus lines or trams, televisions, car motors, bike computers, some motor driven exercise equipment, cellular phones, or when you walk through electric security gates.

Minimizing Possible Risks When Exercising

Exercise may include some risk. Before beginning a regular exercise program, it is recommended that you answer the following questions concerning your health status. If you answer yes to any of these questions, we recommend that you consult a doctor before starting any training program.

- Have you been physically inactive for the past 5 years?
- Do you have high blood pressure or high blood cholesterol?
- Do you have symptoms of any disease?
- Are you taking any blood pressure or heart medication?
- Do you have a history of breathing problems?
- Are you recovering from a serious illness or medical treatment?
- Do you use a pacemaker or another implanted electronic device?
- Do you smoke?
- Are you pregnant?

Note that in addition to exercise intensity, medications for heart, blood pressure, psychological conditions, asthma, breathing, etc., as well as some energy drinks, alcohol, and nicotine may also affect your heart rate.

It is important to be sensitive to your body's responses during exercise. If you feel unexpected pain or excessive fatigue when exercising, it is recommended that you stop the exercise or continue at a lighter intensity.

Notice to individuals with pacemakers, defibrillators or other implanted electronic devices. Individuals who have a pacemaker use the Polar cycling computer at their own risk. Before starting use, we always recommend a maximal exercise stress test under a doctor's supervision. The test is to ensure the safety and reliability of the simultaneous use of the pacemaker and the Polar cycling computer.

If you are allergic to any substance that comes into contact with your skin or if you suspect an allergic reaction due to using the product, check the listed materials on page 57. To avoid any skin reaction to the transmitter, wear it over a shirt. However, moisten the shirt well under the electrodes to ensure flawless operation.

The combined impact of moisture and intense abrasion may cause a black color to come off the transmitter's surface, which might stain light-colored clothes.

9. FREQUENTLY ASKED QUESTIONS

What should I do if...

...the display of the cycling computer is blank?
If you are using the cycling computer for the first time:
The cycling computer is in battery saving mode when it is dispatched from the factory. To activate it, press the **MIDDLE** button twice. The Basic Settings starts. For further information, see page 8.

If you have been using the cycling computer before:
The cycling computer goes to the power save mode (blank), if you do not press any button in the Time mode for five minutes. You can turn the cycling computer on again by pressing any button. Alternatively the battery may be dead (see the next question for further instructions).

...the battery of the cycling computer must be replaced?
We recommend having all service done by an authorized Polar Service Center. This is especially necessary to ensure that the guarantee remains valid and is not affected by incorrect repair procedures performed by an unauthorized agent. Polar Service will test your cycling computer for water resistance after battery replacement and make a full periodic check of the complete cycling computer set.

...there are no reactions to any buttons?
If there are no reactions to any buttons, reset the cycling computer. Resetting only clears the date and time, not the recorded Files or Totals. Reset the cycling computer by pressing and holding all buttons until the display is filled with digits. By pressing any button the cycling computer goes to the Basic Settings mode (**BASIC SET** is displayed). For further information, see page 8. If this does not work, have the batteries checked.
Note: *If you do not press any button after you reset the cycling computer, within one minute the cycling computer goes to the Time mode.*

...the ▭ symbol is activated?
Usually the first sign of an expiring battery is the low battery indicator ▭ on the display. For further information, see page 51.
Note: *Due to cold conditions the low battery indicator may appear, but the indicator disappears when you return to a warmer temperature.*

...another person with a cycling computer or a heart rate monitor is causing interference?
Move away from that person and continue your exercise normally. Alternatively, to avoid other person's heart rate signals:
1. Take the transmitter off your chest for 30 seconds. Stay away from the person with the other device.
2. Put the transmitter back on and bring the cycling computer up to your chest near the transmitter's Polar logo. The cycling computer will start looking for a heart rate signal again. Continue your exercise normally.

...the cycling computer does not measure the calories?
In order to measure the calories you burn, you need to wear the transmitter during recording.

...the heart rate, speed or distance reading becomes erratic or extremely high?
Strong electromagnetic signals can cause erratic readings. So move away from possible sources of disturbance such as high-voltage power lines, traffic lights, electric railways or trams, car motors, bike computers, some motor-driven exercise equipment (like fitness testers) or cellular phones.
If the erratic heart rate reading continues after you have moved away from the source of disturbance, slow down your speed and check your pulse manually. If you feel it corresponds to the high reading on the display, you may be experiencing cardiac arrhythmia. Most cases of arrhythmia are not serious, but consult your doctor nevertheless.
To avoid crosstalk from another cyclist with a speed sensor, keep a distance of at least one meter/ 3'4" between your cycling computer and the speed sensor of the other cyclist.

...there is no heart rate reading (00)?
- Check that the electrodes of the transmitter are moistened and that you are wearing it as instructed.
- Make sure the transmitter is clean.
- Check that you are not near high voltage power lines, televisions, cellular phones, or other sources of electromagnetic interference. Also make sure that you are not near (1 m/3 ft) other heart rate monitor users, when starting your exercise recording.
- Cardiac arrhythmia may cause irregular readings or a cardiac event may have altered your ECG waveform. In these cases, consult your physician.

...there is no speed reading while cycling?
- Check the correct position and distance of the sensor with the magnet and the cycling computer.
- Check that you have set the correct cycling settings in your cycling computer. For further information, see page 39.
- If the 00 reading appears irregularly, this may be due to temporary electromagnetic interference in your current surroundings.
- If the 00 reading is constant, you may have exceeded 4500 riding hours and the battery is empty.

10. TECHNICAL SPECIFICATIONS

Cycling computer

Material:	Thermoplastic polymer case
Watch accuracy:	better than ±0.5 seconds per day at 25 °C/ 77 °F temperature.

Heart rate accuracy: ±1% or 1 bpm, whichever larger, the definition applies to steady state conditions. Heart rate is displayed as number of heartbeats per minute (bpm) or as % of your maximum heart rate.

Heart rate measuring range:	15-240
Maximum time recorded to File:	99 h 59 min 59 s
Limited values of information to the exersice file:	1 exercise file
Current speed display range:	0-127 km/h or 0-75 mph
Operating temperature:	-10 °C to +50 °C / +14 °F to +122 °F
Battery life:	Average 2 years in normal use (1 h/day, 7 days/week)
Battery type:	CR 2032
Battery sealing ring:	OR 23.6 x 1.0 (silicon rubber)

Water resistance of Polar products is tested according to International Standard ISO 2281. Products are divided into three different categories according to their water resistance. Check the back of your Polar product for the water resistance category and compare it to the chart below. Please note that these definitions do not necessarily apply to products of other manufacturers.

Transmitter

Battery life:	Average 2500 hours of use
Battery type:	Built-in Lithium Cell
Operating temperature:	-10 °C to +50 °C / +14 °F to +122 °F
Transmitter material:	Polyurethane

Elastic strap

Buckle material:	Polyurethane
Fabric material:	Nylon, polyester, and natural rubber, including a small amount of latex

Speed sensor

Speed sensor battery life:	Average 4500 hours of use
Accuracy:	±1 %
Material:	Thermoplastic polymer case
Operating temperature:	-10 °C to +50 °C / +14 °F to +122 °F

SYSTEM REQUIREMENTS

Polar UpLink Tool

- PC
- Windows® 98/98SE/ME/2000/XP
- Sound card
- Dynamic loudspeakers or headphones

Marking on the case back	Wash splashes, sweat, raindrops etc.	Bathing and swimming	Skin diving with snorkel (no air tanks)	SCUBA diving (with air tanks)	Water resistant characteristics
Water resistant	X				Splashes, raindrops etc.
Water resistant 50m	X	X			Minimum for bathing and swimming
Water resistant 100m	X	X	X		For frequent use in water but no SCUBA diving

11. LIMITED POLAR INTERNATIONAL GUARANTEE

- This guarantee does not affect the consumer's statutory rights under applicable national or state laws in force, or the consumer's rights against the dealer arising from their sales/purchase contract.
- This limited Polar international guarantee is issued by Polar Electro Inc. for consumers who have purchased this product in the USA or Canada. This limited Polar international guarantee is issued by Polar Electro Oy for consumers who have purchased this product in other countries.
- Polar Electro Oy/Polar Electro Inc. guarantees the original consumer/purchaser of this device that the product will be free from defects in material or workmanship for two (2) years from the date of purchase.
- **The receipt of the original purchase is your proof of purchase!**
- The guarantee does not cover the battery, normal wear and tear, damage due to misuse, abuse, accidents or non-compliance with the precautions; improper maintenance, commercial use, cracked, broken or scratched cases/displays, elastic strap and Polar apparel.
- The guarantee does not cover any damage/s, losses, costs or expenses, direct, indirect or incidental, consequential or special, arising out of, or related to the product.
- Items purchased second hand are not covered by the two (2) year warranty, unless otherwise stipulated by local law.
- During the guarantee period, the product will be either repaired or replaced at any of the authorized Polar Service Centers regardless of the country of purchase.

Guarantee with respect to any product will be limited to countries where the product has been initially marketed.

CE 0537 This CE marking shows compliance of this product with Directive 93/42/EEC.

This crossed out wheeled bin marking shows that Polar products are electronic devices and are in the scope of Directive 2002/96/EC of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE) and batteries and accumulators used in products are in the scope of Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators. These products and batteries/accumulators inside Polar products should thus be disposed of separately in EU countries.

This marking shows that the product is protected against electric shocks.

12. POLAR DISCLAIMER

- The material in this manual is for informational purposes only. The products it describes are subject to change without prior notice, due to the manufacturer's continuous development program.
- Polar Electro Inc./Polar Electro Oy makes no representations or warranties with respect to this manual or with respect to the products described herein.
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LISTEN TO YOUR BODY

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